INTERNATIONAL SEARCH REPORT

Intentional Application No PCT/EP2004/003660

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E21B47/01 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 E21B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to daim No. X WO 01/77711 A (SCHLUMBERGER CA LTD : CHEUNG 1 - 14PHILIP (FR); HAYMAN ANDREW (FR); SCHLU) 18 October 2001 (2001-10-18) page 10, line 7-14; claim 1; figure 4 page 6, line 7 - line 35; figures 2,4 US 4 738 812 A (RAYNAL JEAN C) X 1,14 19 April 1988 (1988-04-19) column 2, line 51 -column 3, line 20: figure 2 Α US 4 002 063 A (ANGEHRN JORG AUGUST) 1,14 11 January 1977 (1977-01-11) figure 5 Α US 3 566 682 A (WINKLER JOHN H JR) 1,14 2 March 1971 (1971-03-02) column 3, line 41 - line 51 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention *E* earlier document but published on or after the International filing date "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu-ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 13 July 2004 20/07/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Stroemmen, H. Fax: (+31-70) 340-3016

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